

ABSTRACT

A non-aqueous, reduced toxicity polyhydric alcohol based heat transfer fluid is provided comprised of at least one polyhydric alcohol that acts as an ADH enzyme inhibitor, such as for example propylene glycol, thereby reducing the toxicity of ethylene glycol if ethylene glycol. The heat transfer fluid may also include corrosion inhibitors that are soluble in the polyhydric alcohols used for the heat transfer fluid. The heat transfer fluid may be used as a coolant in internal combustion engines such as automobile engines, a coolant for cooling electrical or electronic components, as a heat transfer fluid for solar energy heating systems, or a heat transfer fluid for maintaining temperatures in industrial processes. A low toxicity preparation fluid for absorbing water from heat exchange systems prior to installation of the heat transfer fluid is also provided that is comprised of ethylene glycol and at least one polyhydric alcohol, preferably propylene glycol, that acts as an ADH enzyme inhibitor.